



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
841 Chestnut Building  
Philadelphia, Pennsylvania 19107-4431

AUG 17 1993

The Honorable Dominic Curinga  
Mayor, City of Clairton  
City Hall  
Clairton, Pennsylvania 15025

Dear Mayor Curinga:

This letter is in response to a citizen's complaint you have informally made during a telephone conversation with a representative of EPA, Region III's Public Affairs Office, on July 12, 1993. The complaint was made in regard to unusual activities at U.S. Steel's Clairton Works facility, allegedly associated with the charging of certain coke ovens with a "tar-like resin" (possibly toxic substance). According to your sources of information, the materials were usually delivered to the facility at night.

You also indicated that, being a local resident for 39 years, you have become very familiar with the odors generally associated with the coke works, but have never before experienced the new and very specific odor emanating from the facility lately.

EPA, Region III, has taken the alleged violations very seriously and, as a "follow-up" action, conducted a multi-media investigation, including, but not limited to, unannounced field inspection of the U.S. Steel's Clairton Works on July 20, 1993, interviews with the company representatives, review of the company's permit file at the Allegheny County Health Department and the 1990 Consent Agreement with the PADER. The Investigative Team was comprised of the following personnel: William Klettner, Team Leader, Civil Investigator, Gary Gross, Environmental Engineer, Paul Gotthold, Section Chief (RCRA), Doug Donor, Land Disposal Restriction Program, all EPA, Region III; Sam Harper, Environmental Cleanup, PADER; William Gilson, Steel Specialist, Larry Werner, Toxicologist, Harilal L. Patel, Chief, Air Quality Monitoring, John Logan, Air Quality Monitoring, all ACHD, Bureau of Environmental Quality.

In the course of this multi-media investigation, EPA collected a substantial amount of the pertinent information. A brief summary of this information follows:

- U.S. Steel/USX Corporation entered into a Consent Agreement with the PA DER in 1990 to remove tar decanter sludge from the Peter's Creek Lagoon. The purpose of the agreement is to prevent the Lagoon's seepage into the creek which flows into the Monongahela River.

- The Peter's Creek Lagoon is located on company property adjacent to the Clairton Works, and had been used as a surface impoundment for approximately 60 years for disposal of tar decanter sludge, lime, and other coke by-product wastes associated with the cokemaking operations. The Clairton Works ceased all dumping operations at the Peter's Creek Lagoon prior to 1980.

- Two companies, AJK and 7-7 Incorporated, are currently handling tar decanter sludge at the Clairton Works.

AJK handles tar decanter sludge currently generated by the plants' 12 operating coke oven batteries. The tar decanter sludge is collected, fluidized, diluted, and subsequently sprayed onto prepared coal prior to being charged back into ovens. One-half gallon of the pretreated "fresh" tar sludge is applied per ton of coal charged. This is a normal waste recycling operation allowed under RCRA, PADER, and ACHD regulations.

7-7 Inc. processes tar decanter sludge recovered from the Lagoon for the offsite shipment to commercial Boiler, Industrial Furnaces (BIF) regulated facilities.

- U.S. Steel asked Allegheny County for permission to run a trial test (six months duration) to recycle a limited amount of the sludge recovered from the Lagoon. The permission was granted, and trial runs at Battery #9, Oven A1, began in February, 1993. Since the trial runs began, the Allegheny County Bureau of Environmental Quality (BEQ) and PA DER have received several complaints from union leaders at the coke plant regarding odor and possible releases of hazardous materials. U.S. Steel was ordered to stop the testing until a further review of the matter was made, and the company complied.

- After researching the matter with EPA (RCRA) and PA DER personnel, as well as with U.S. Steel representatives, the BEQ found no legal reasons to preclude the limited use of the Peter's Creek Lagoon tar sludge in the pilot project at the single oven A1, #9 Coke Battery. In order to minimize any possible adverse effect on the environment and the public health, on July 14, 1993, the BEQ imposed more stringent requirement on recycling the sludge in this single oven. Some of those requirements are:


- a) Only one load a day (not to exceed 1 ton of sludge) is to be charged into the oven. The overall oven capacity is roughly 15 tons per charge.
- b) Test oven must be on a 24-hour cycle.
- c) Trials must take place on daylight turn.
- d) BEQ will monitor the tests.

It should be noted that two unrelated factors have contributed to the public confusion and anxiety besetting this case. The first factor is the way U. S. Steel has chosen to handle the whole matter with the testing runs. The company didn't allow anyone (except for the crew) on the battery into which sludge was being pumped and reprocessed. Eventually, U.S. Steel realized that the unnecessary secrecy coupled with the company's insensitivity to the legitimate public concerns resulted in a much more serious matter than a purely "Public Relations" issue. In an attempt to correct this situation, U.S. Steel met with the union, explained what they were doing, and complaints ceased. At the present time, two union representatives are assisting in the test trials. Benzene levels are monitored by Enviro Health Technologies, a private contractor.

The other factor contributing to the problem was the presence of (as we all know) the prolonged periods with unusually high temperature and humidity. This combination had most likely left the surface of the Lagoon's tar sludge directly exposed to the ambient air with no protective water cover, usually about 8 inches thick. As a result, the accelerated evaporation of the benzene residue from the sludge could have substantially enhanced the emanation of the light "sour" odor of benzene.

I hope this information is helpful to you. If you have any questions concerning this matter, please contact Mr. Michael Ioff, of my staff, at (215) 597-9858.

Sincerely,



Bernard E. Turlinski, Chief  
Air Enforcement Branch